

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference <b>2003P04019WO</b>	<b>FOR FURTHER ACTION</b>		See item 4 below
International application No. <b>PCT/EP2004/052928</b>	International filing date ( <i>day/month/year</i> ) <b>11 November 2004 (11.11.2004)</b>	Priority date ( <i>day/month/year</i> ) <b>20 November 2003 (20.11.2003)</b>	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant <b>SIEMENS AKTIENGESELLSCHAFT</b>			

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).
  2. This REPORT consists of a total of 5 sheets, including this cover sheet.
- In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:
 

<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/> Box No. VI	Certain documents cited
<input type="checkbox"/> Box No. VII	Certain defects in the international application
<input type="checkbox"/> Box No. VIII	Certain observations on the international application
4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Date of issuance of this report <b>19 September 2006 (19.09.2006)</b>
Facsimile No. +41 22 338 82 70	Authorized officer  <div style="text-align: center; font-size: 1.2em;">Ellen Moyse</div> e-mail: pt05@wipo.int

# PATENT COOPERATION TREATY

TRANSLATION

From the  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing **See form PCT/ISA/210**  
(day/month/year)

Applicant's or agent's file reference

**2003P04019WO**

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/EP2004/052928**

International filing date (day/month/year)

**11.11.2004**

Priority date (day/month/year)

**20.11.2003**

International Patent Classification (IPC) or both national classification and IPC

**A61B6/03**

Applicant

**SIEMENS AKTIENGESELLSCHAFT**

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/052928

Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/052928

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims <u>1-12</u>	YES
	Claims _____	NO
Inventive step (IS)	Claims <u>1-12</u>	YES
	Claims _____	NO
Industrial applicability (IA)	Claims <u>1-12</u>	YES
	Claims _____	NO

2. Citations and explanations:

Reference is made to the following documents:

D1: US5448608 A

D2: US6412979 B

Document D1, which is considered the **closest prior art**, discloses a supporting frame for a computer tomograph, with a bearing ring to rotatably mount a rotatable drum. Furthermore, a person skilled in the art knows that said bearing ring is typically configured in the form of a metal ring or a ring section, preferably of a low-weight rigid material such as aluminum, a magnesium-aluminum alloy and the like, and that it can be solid or, in order to reduce weight, hollow (see D1, column 4, lines 24-28).

The **subject matter of claim 1 differs from the above** by the features of the characterizing part, namely the fact that the bearing ring is configured as a hollow section in which two fluidly separated annular closed hollow spaces are formed, of which a first hollow space forms an annular channel for supplying coolant to the drum and a second hollow space forms an annular channel to conduct the coolant away from the drum.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/EP2004/052928

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

This **difference provides a solution to the problem** of creating a supporting frame for a computer tomograph with a coolant-conducting system which is well-suited for this purpose and also simple to construct.

Document D2 discloses a computer tomography system in which a heat exchanger is arranged with the rotating drum in a co-rotating manner in the gantry housing. The heat is conducted away while the rotating drum is idling between two measurements by means of a quick coupling between the heat exchanger and the water cooling circuit that is arranged outside the gantry housing.

A bearing ring configured as a hollow section is well-known to a person skilled in the art; however, the available prior art does not give any suggestion of configuring a bearing ring as a hollow section in which two fluidly separated annular closed hollow spaces are created in order to conduct coolant according to claim 1. Therefore, the invention is considered to involve an inventive step.

Claim 10 contains all of the features of claim 1 and thus likewise satisfies the PCT requirements with respect to novelty (PCT Article 33(2)) and inventive step (PCT Article 33(3)).